AMENDMENTS TO THE DRAWINGS:

Please find accompanying this response replacement sheets for Figs. 1-3 wherein amendments explained in the Remarks presented below are effected.

REMARKS

The above amendments and following remarks are responsive to the Office Action of November 1, 2004. Reconsideration of the application and a notice of allowance are earnestly solicited.

The Examiner has objected to figure 3 for not containing the legend "Prior Art". Figure 2 has been objected to for referring to elements 12a, 12b and 16b which are not otherwise disclosed in the application. Figure 1 has been objected to for illustrating "16o" which the Examiner believes should be labeled "16r" and because 13a2 has no associated lead lines pointing to any structural element. The drawings are objected to for not containing the reference numbers 12i, 16i, 12r and 16r which are disclosed in the specification on pages 15 and 21. The specification is objected to because "cylinder 34" on page 7 should be corrected to read "cylinder 24", "19a" on page 13, 3rd line, should be corrected to read "19", "cylinder 4" on page 14, 10th line from the bottom should be corrected to read "cylinder 24", and "11a" on page 17, 7th line should be corrected to read "11". Applicant has corrected the drawings and the specification to overcome the objections.

Claims 1-6 are rejected under 35 U.S.C. §103 (a) as being unpatentable over Aoki (U.S. Patent No. 4,044,653) in view of Hehl (U.S. Patent No. 4,380,427). The Examiner acknowledges that Aoki fails to teach the use of a

hydraulic system for a mold clamping cylinder but asserts that Hehl teaches this limitation. This rejection cannot be maintained against any claim unless the combination of Aoki and Hehl teaches each element of the respective claim. *In re Royka*, 490 F.2d 981 (CCPA 1974) (a prima face case of obviousness is established only where the combination of cited references teaches our suggests each limitation in the claim). Based on this requirement, Applicant provides the following analysis and traverse.

Aoki relates to an injection device for filling a cavity in relation to molds and metal formation. Hehl presents a method of opening and closing a die that employs direct pressure. While Hehl shares the same purpose with the current invention in that it employs direct pressure and differentiates between using high speed mold clamping and high pressure mold clamping, it is greatly different from the current case in how the invention is realized and configured.

In the Hehl reference, a specific amount of hydraulic fluid pressured from a pump is alternately routed to two types of cylinders, a cylinder with a large area for high speed and a cylinder with a small area for high pressure, by switching valves.

On the other hand, in the current invention, instead of differentiating with cylinders, a pump with a large volume is used for high speed and a pump

with a small flow is used for high pressure. In particular, speed and pressure are controlled using a servomotor instead of controlling by a valve.

Moreover, Aoki illustrates a pump P in figure 1 and discloses the same in column 3, line 15 et seq. However, the reference fails to state that the pump is a "two-way" device. Hehl fails to mention using a pump.

As compared with the combination of Aoki and Hehl, pending claims 1 and 2 recite that the pump is a "two-way" device. Accordingly, the claim recites limitations not taught by the combined references, and the rejection under section 103 (a) cannot be maintained. *Royka*, 490 F.2d at 981

Claims 7 and 8 are rejected under 35 U.S.C. §103 (a) as being unpatentable over Aoki as modified by Hehl and as further modified by Mizunaga. The Examiner acknowledges that nether Aoki nor Hehl teach "that the two-way hydraulic pumps are servomotors" but asserts that Mizunaga teaches this limitation. Applicant interprets the Examiner's rejection to mean that Aoki and Hehl fail to teach that the two-way pumps are controlled by servomotors. However, based on the above analysis, this rejection cannot be maintained against any claim unless Mizunaga teaches a two-way pump. *Royka*, 490 F.2d at 981. Accordingly, Applicant provides the following analysis and traverse.

Mizunaga relates to an injection device for filling a cavity in relation to molds and metal formation. Aoki and Mizunaga relate to injection devices that perform filling into a die. Neither of the references describe opening and closing a die.

Moreover, Mizunaga fails to teach a two way pump but rather illustrates in figure 1 and teaches in the translated abstract a unidirectional molten metal supply pump 20. Based on Applicant's interpretation of the rejection, the rejection cannot be maintained because the combination of Aoki, Hehl and Mizunaga fails to teach a two-way pump as recited in pending claims 1 and 2. *Royka*, 490 F.2d at 981.

Applicant respectfully requests a one month extension of time for responding to the Office Action. Please charge the fee of $120.00 for the extension of time to Deposit Account No. 10-1250.

In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited. Please charge any deficiency or credit any overpayment to Deposit Account No. 10-1250.

Respectfully submitted,

JORDAN AND HAMBURG LLP

By _____
C. Bruce Hamburg
Reg. No. 22,389
Attorney for Applicants

Jordan and Hamburg LLP
122 East 42nd Street
New York, New York 10168
(212) 986-2340